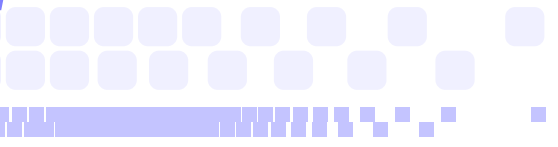




PixagentTM
Engineered Workflow



WT-1/WT-1A Setup Guide



Ad-Hoc Setup for Windows XP Service Pack 2 or Later

Written by Thomas Sapiano

Second Edition

www.pixagent.com



Nikon WT-1/1A Transmitter Setup Guide for Windows XP SP2

This document provides step-by-step instructions on how to configure your Nikon WT-1/WT-1A wireless transmitter and computer to communicate with one another. Each step is provided with a screenshot to make the setup process as easy as possible.

System Requirements

Operating System:

Windows XP
Service Pack 2 or later

Software:

Pixagent ITP 2.0
.NET Framework 1.1

Hardware:

IEEE802.11b or IEEE802.11g Card
Nikon D2H/D2Hs/D2X
Nikon WT-1/WT-1A

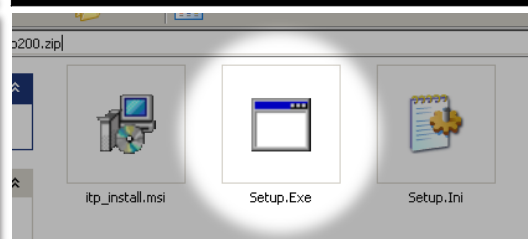
Internet Links

<http://www.pixagent.com/itp20/>

<http://www.pixagent.com/support/>

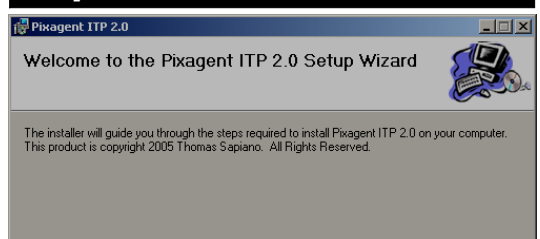
support@pixagent.com

Step 1



After downloading ITP 2.0 from the Pixagent website, open the compressed file and run 'Setup.Exe' to begin the install process.

Step 2



Follow the directions in the installation wizard to place the ITP 2.0 files on your computer.

Step 3

ITP 2.0 Installer - Anonymous Logins

This server can be configured to accept anonymous logins in addition to conventional users. While this makes setup of some devices easier, it is also a potential security risk as anyone can log into the server. By default anonymous logins will be blocked, however if desired you may enable them at this stage.

☐ Allow Anonymous Logins

Skip

Continue...

This setting may be changed at a later date by right clicking on the ITP tray icon and selecting 'Configuration...'

When prompted whether to allow anonymous logins, leave the checkbox empty and click the 'Continue...' button to move on.

Step 4

ITP 2.0 Installer - Create First User

In order for devices to connect to this server, you must first create a user account. To simplify this process, please enter a username and password in order to create your first user.

Username: tom

Password: xxxx

Skip

Create User

This will create a user with default settings. To modify more advanced settings or to create additional users, go to the 'Edit Users...' option inside of ITP.

When the 'Create First User' window pops up, enter a new username and password pair and click the 'Create User' button.

Step 5

ITP 2.0 Installer - Select Storage Location

Please select the location where you would like images received by the server to be stored on your computer. Any files that come in via FTP or the synchronization feature will be placed in this directory (or a subdirectory specified in a user account).

My Pictures

Browse

Skip

Continue...

This step configures the root folder setting in ITP server. If you would like to modify this in the future, select 'Configuration' in the ITP tray menu.

Select the location where you would like ITP to place the received image files on your computer. Click the 'Continue' button when you are done.

Step 6

ITP 2.0 Installer - Select Wireless Adapter

Please select the wireless network card that will be used by this system to communicate with the transmitters. After being selected, ITP will perform some initial setup tasks that will simplify further configuration steps.

Select Wireless Adapter:

3Com EtherLink Server 10/100 PCI (3C980C-TX-M) - Packet S

Skip

Continue...

This step will create a virtual IP Address on this adapter. This allows you to use a single configuration for your transmitter regardless of what network your computer is connected to.

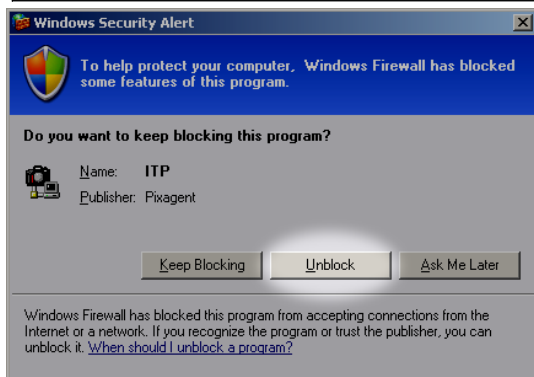
Select the network adapter that the wireless transmitter will use to communicate with your computer and click 'Continue'.

Wireless Setup Guide

Windows XP Service Pack 2 or Later

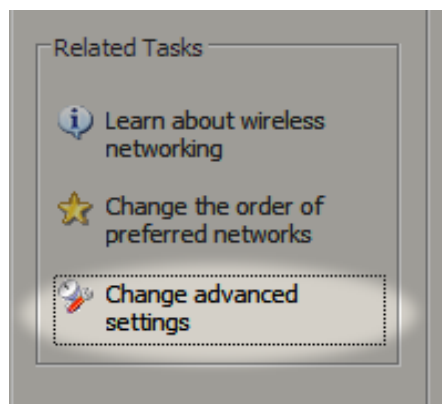


Step 7



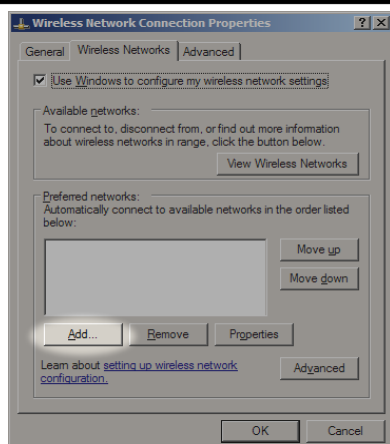
If the Windows Firewall is enabled on your computer, you will be prompted to continue blocking ITP. When this dialog pops up, select the *Unblock* button to allow ITP to receive connections from the camera. This is necessary for proper operation of your system.

Step 9



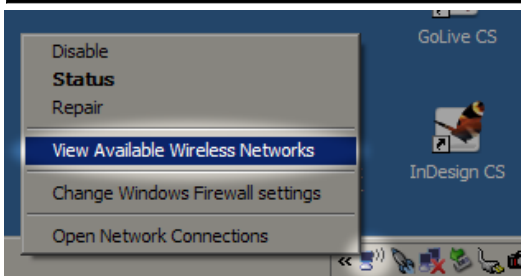
Once the *Wireless Network Connection* dialog is open, click on the *change advanced settings* link on the left side of the window.

Step 11



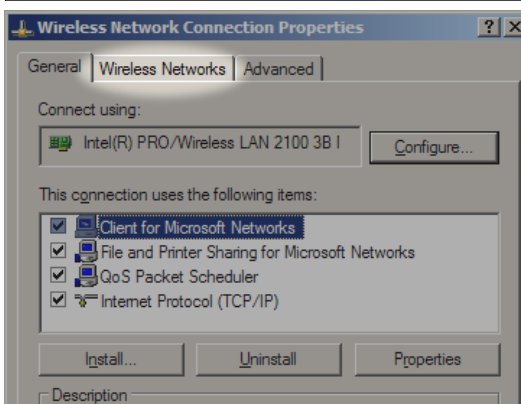
Click the *Add* button to begin the process of creating a new ad-hoc network on this computer.

Step 8



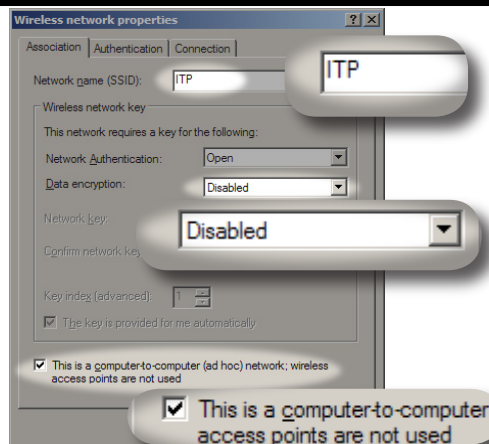
Once the install procedure is complete, you now have to configure your computer to create an ad-hoc network for the camera to connect to. This type of network allows your camera and computer to communicate without the need for any additional equipment. To create the network, right click on your wireless adapter's tray icon and select *View Available Wireless Networks*.

Step 10



Select the *Wireless Networks* tab in the resulting window to configure the wireless settings for this network adapter.

Step 12



In the resulting dialog, enter the settings specified in the fields highlighted above and click *OK* to create the new network.

Firewalls

Firewalls are designed to protect computers from outside threats. One of the mechanisms used to do this is to block any connection that does not originate from the computer/network. For normal users this typically isn't a problem as the tasks they perform are initiated by the user.

These image transmitters work in a different manner, however. When an image is ready to be transmitted, the camera is the one that initiates the connection. As such, in their default configuration, most firewalls will attempt to prevent this action from taking place. When that happens, the camera will be unable to connect to your computer.

If you are using firewall software other than the one supplied with Windows XP you may need to perform additional steps. In order for the camera to function correctly, the firewall must be configured to allow incoming FTP traffic (TCP/IP port 21). The way that you do this depends on the firewall being used, so please read the instructions that came with it.

Ad-Hoc Networks

The 802.11 standard provides a mode called ad-hoc to allow devices to connect directly to one another. This allows you to use your system out in the field without being dependant on routers or AC power.



Wireless Setup Guide

Windows XP Service Pack 2 or Later

Preferred Networks

Windows XP wireless networking subsystem allows you to maintain a list of preferred networks. This list allows you to control the priority of different access points that you typically connect to. Once a network has been added to this list you can select it and move it up and down with respect to the other networks.

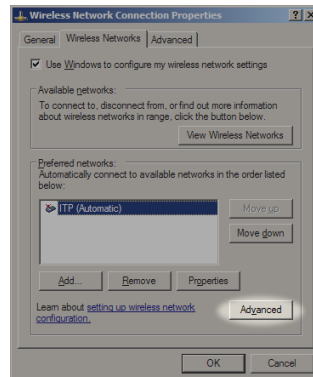
Unfortunately, it will not allow you to place ad-hoc networks (like the one you are setting up here) above infrastructure (access-point based) networks. As such, we need to tell the OS to ignore any infrastructure networks that it may come upon as you are working.

ITP User Accounts

In order to connect to an FTP server, the camera must supply login information to identify itself. The installation process will create the first user for you, however if you would like you can create more users by clicking the *Add User* link in the red section of the *Control Centre*.

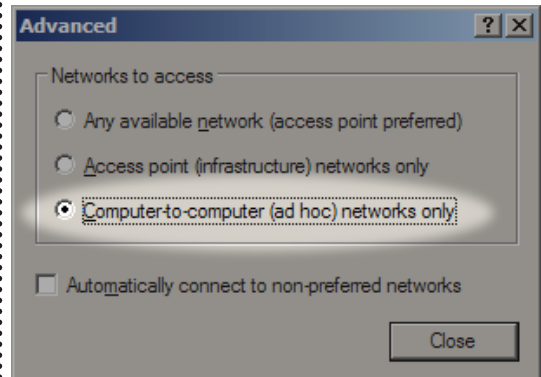
In addition to providing a basic layer of security, user accounts also allow you a greater degree of control. For instance, the files transmitted using each account are saved in different locations. This allows you to easily keep images from different cameras and/or shooters separate from one another.

Step 13



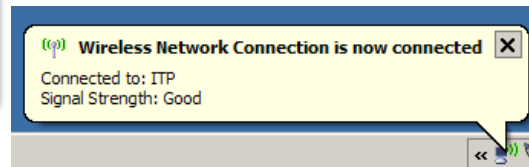
When returned to the previous dialog, click the *Advanced* button to configure the computer to connect to your new network.

Step 14



Select the *Computer-to-computer (ad hoc) networks only* entry from the list and click *Close* to commit the settings and dismiss the remaining dialogs.

Step 15



After a moment, the computer will create the new network and will be ready to use.

Step 16



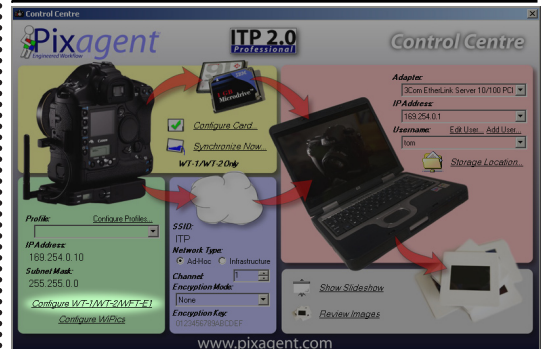
Now that ITP and the computer have been set up, we need to configure your camera. To begin this process, double click on the ITP tray icon.

Step 17



Once the *Control Centre* interface comes up, enter the wireless settings you have specified into the *blue* section. If you used the values specified above, the only setting you will need to change is the *Network Type* to *Ad-Hoc*.

Step 18



Once the specified settings have been selected, click the *Configure WT-1/WT-2/WFT-E1* link to begin the process of configuring your camera. Follow the provided directions to load these settings onto a memory card.

Selecting your wireless network adapter.

During the installation process, you are prompted to select the network adapter used for your transmitter. Whenever ITP is started, it will automatically take steps to configure this adapter to operate with your transmitter. As such, if you switch to using another adapter you should change your selection in the 'Configure Adapter' entry in the ITP tray menu to ensure that these features continue to operate.

Wireless Setup Guide

Windows XP Service Pack 2 or Later



Step 19



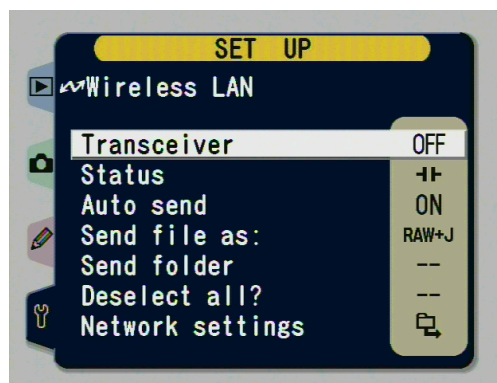
Remove the CF card from your computer and insert it into the camera with the WT-1 attached. Wait for the green light to go out, then press the *Menu* button. Navigate to the *Set Up* tab (the bottom tab) and continue on to the next step...

Step 20



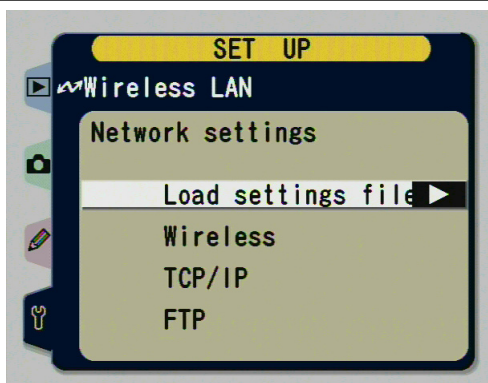
Select the *Wireless LAN* entry and press the controller pad right to configure the WT-1 transmitter.

Step 21



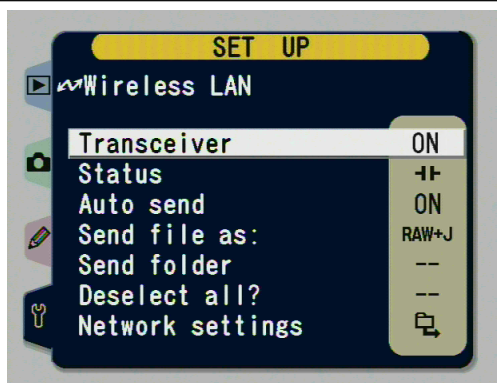
Once the *Wireless LAN* menu appears select the *Transceiver* entry and switch it to the OFF position.

Step 22



Select the *Load settings file* entry and instruct the camera to retrieve the settings from the card.

Step 23



When the settings have been loaded, return to the *Wireless LAN* menu. Return to the *Transceiver* entry and switch it back to ON.

Step 24



Complete

If everything has worked correctly, the transmitter will now be functional. If you haven't done so yet, take a picture to ensure that it is transmitting correctly. If it is *not* working, please see the troubleshooting section.

Static IP Addresses

Most devices on home networks are configured to automatically retrieve network data from the router. Since there is no router in ad-hoc configurations this information needs to be manually entered into both devices.

WiFi SSIDs

Wireless networks must be given a unique name so that devices will connect to the correct system. Under the 802.11 standard this network name is called the SSID.

Encryption

The Nikon WT-1/1A supports a form of security called WEP. When enabled in both the camera and the laptop, all transmitted images will be encrypted to prevent anyone from intercepting them.

For simplicity sake, this guide leaves this feature disabled. For most people this encryption is not necessary - however if you are concerned about this you can turn it on.

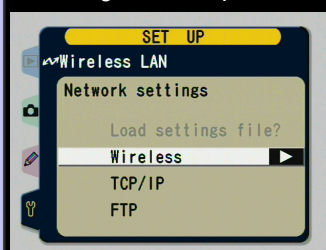


Troubleshooting Guide

The WT-1 is a complex device and problems may arise when trying to set it up the first time. This section is designed to guide you through the process of identifying those problems and rectifying them.

Troubleshooting

If the profile was not properly loaded onto the card the 'Load settings file?' entry will be greyed out as shown in the following screen capture:



If this happens, please return the Compactflash card back into the computer. Return to the *Control Centre* and press the *Configure WT-1/WT-2/WFT-E1* link to reload the profile on the card.

Repeat steps 18 through 23, taking special care to ensure that the drive letter specified in step 18 is correct. It is advised that you verify your selection in Windows Explorer before going on.

If everything was done correctly this time, the entry should be available and you will be able to continue on.

Symptom: Flashing Power LED



This scenario usually occurs when there is a conflict between settings that have been uploaded into the camera. There are a number of issues that can cause this problem and the following section covers a number of them and their solutions.

Step 1: Ensure settings have been loaded properly.

Sometimes the WT-1 will not properly load all of the settings from the memory card. It can be very sensitive to the manner in which you *leave* the menus after loading the settings file. Please carefully repeat steps 20-23 in the instructions in order to reload the settings.

If it is still not connecting properly, please check the settings in the camera and compare them to the ones listed in the instructions contained in this document.

Step 2: Verify that the correct settings are selected.

The *Control Centre* should automatically load the network settings from the host computer. Return to the 17th step and reselect an IP Address in the red section to trigger the reloading of the rest of the settings. If the only available address is 0.0.0.0, then return to the wireless configuration and ensure that your computer is attached to the newly created network.

Step 3: Check software firewalls running on the laptop.

If you are running any software firewalls on your laptop, check the settings to ensure that they are not blocking incoming FTP traffic. Each product works in a different way so detailed directions are beyond the scope of this document.

Wireless Setup Guide

Windows XP Service Pack 2 or Later



Symptom: Solid Link LED



When the camera is trying to connect to the server but has not run into an error yet it will display this pattern with its LEDs. This can happen because of a number of problems that are covered in the following paragraphs.

Step 1: Ensure settings have been loaded properly.

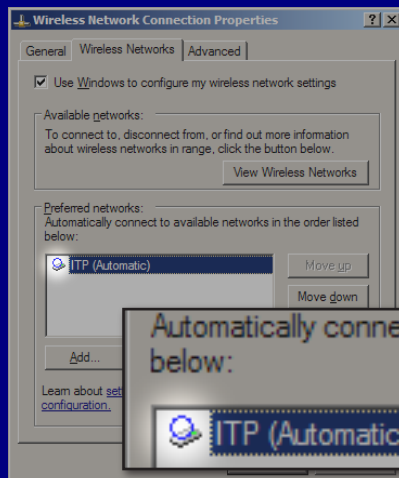
Sometimes the WT-1 will not properly load all of the settings from the memory card. It can be very sensitive to the manner in which you *leave* the menus after loading the settings file. Please carefully repeat steps 20-23 in the instructions in order to reload the settings.

If it is still not connecting properly, please check the settings in the camera and compare them to the ones listed in the Control Centre.

Step 2: Double check SSID values.

The SSID settings in the computer and camera are sensitive to things like case and leading/trailing spaces. Return to step 12 and verify that the Network name (SSID) field is set to ITP with no extra spaces. If that doesn't help, then return to the dialog in step 17 to make sure the SSID field has the same contents.

Step 3: Verify that laptop is connected to the camera.



Return to the *Wireless Networks* tab (see step 10) and verify that the laptop is connected to the camera. Check the Preferred Networks list and verify that the connected icon is shown beside the ITP entry.

Continued on next page...

Troubleshooting

If you are having problems, the three LEDs on the back of the WT-1 are the best way to diagnose them. This legend describes the various patterns to help you troubleshoot the source of the problem.



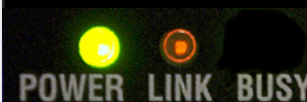
Transmitting

The WT-1 has successfully connected to your computer, and is currently transmitting images.



Connected

The WT-1 has successfully connected to your computer, but is not currently transmitting images.



Trying to Connect

The WT-1 is trying to connect to the FTP server but has not been able to do so.



Connection Failure

The transmitter has run into a problem that is preventing the connection from being formed.



Wireless Setup Guide

Windows XP Service Pack 2 or Later

Connection Status

Connected

When the laptop has associated with a network, this icon will be shown beside its name in the list of networks. This signals that the computer is now ready to communicate with other devices using the same SSID.

Available

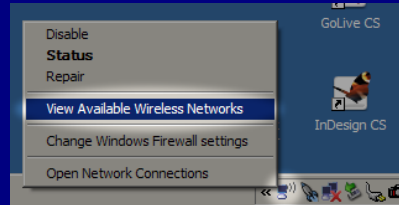
The laptop has detected the presence of this network. It has not associated with it, however it is available to connect to.

Unavailable

This icon is displayed beside networks that the laptop cannot find in the vicinity. You may be out of range or the camera may not be turned on.

Continued from previous page...

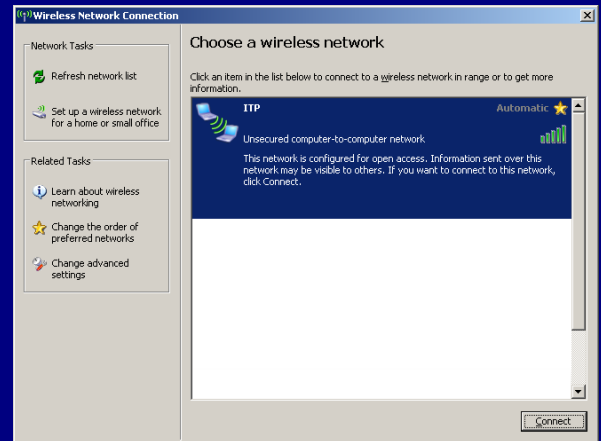
If it is not connected, the first thing to do is verify that the computer has been configured to attach to ad-hoc networks. Return to the window shown in step 14 and verify the settings have taken.



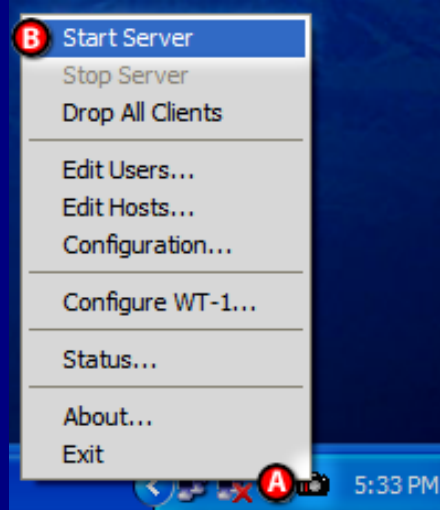
Close the previous dialogs to apply the settings. Switch the transmitter on and try to connect to the computer. If the WT-1 still isn't working, right-click on the Wireless adapter's tray icon and select *View Available Networks* with the transmitter still on.

On the resulting window, select the ITP entry from the list of networks. Click the *Connect* button and the laptop should connect.

If the ITP entry is not available make sure that the WT-1 is still on and select *Refresh network list*.



Step 4: Verify that ITP is running properly.



Right-click on the ITP icon (A) in the system tray. If the Start Server entry (B) is not greyed out, select it. Try the WT-1 again to see if it is working.

If ITP is already running then try to connect to 127.0.0.1 with FTP client software. If you are unable to connect then double check your settings in ITP and any firewall software you are running.

Wireless Setup Guide

Windows XP Service Pack 2 or Later

Connecting to the Internet

The process listed above will prevent your laptop from connecting to conventional wireless networks. If you use a WiFi network for your internet access, then you will have to reverse the changes made in step 14 above to allow this.

Still having problems...

If the above troubleshooters still have not resolved your problems, please feel free to contact us at support@pixagent.com. Some problems need more complex debugging steps that will require personal attention. You can also visit us at:

<http://www.pixagent.com>



ITP Registration

If you have not already done so, please register your copy of ITP 2.0 so that we can notify you of any future updates to the software. Our registration data is not shared with any outside parties and will only be used as you specify on the registration form.

This information helps us keep our customers up to date on any improvements made in our products. If you wish, you may also be placed on the list of potential beta-testers for the upcoming versions of our software.

Pixagent™
Engineered Workflow

Products Services Support News Company

ITP 2.0 Pro Now Available

New! Make the Most of your Wireless Workflow

- Automatic processing of incoming images.
- Live image review and slideshow functions.
- Memory card synchronization system.

Features Screenshots Manual Download

ITP Features

- Assisted Camera Configuration
- Memory Card Synchronization
- Automated Processing Features
- Live Image Review & Analysis
- Live Slideshow System
- Centralized Control Interface
- Adapter Management System
- Batch Renaming & More...

More Information

PocketITP 1.2

- Assisted Camera Configuration
- Battery and Card Space Readouts
- Instant Preview of Images
- Simple, one Handed Operation
- Full Administration from PDA
- Automatic Memory Card Failover
- Power Saving Features
- Compact Footprint

More Information

© Copyright 2004 Thomas Sapiano. All Rights Reserved.

www.pixagent.com

© Copyright 2006 Thomas Sapiano. All rights reserved. This document is protected by Canadian copyright law and may not be reproduced without the explicit consent of its author. IP networking can be a complex topic and no single setup will work in all situations. These directions assume a standard configuration and may not function under all circumstances. As such, this document is provided on an as-is basis without warranty - by using this document the reader accepts all responsibility for their actions. The author does not accept any responsibility for problems that may occur while following these directions.